APPLICANTS. Griffin et al. ATTY. DOCKET NO.: SRT-025 EXPRESS MAIL NO.: EL653443302US (Sheet 1 of 10) 34 36 FIG. 1 KEYBOARD POINTING DEVICE 20 COMPUTER SYSTEM 38 42 PROGRAMS PROGRAMS PERIPHERAL DEVICES OTHER ADDITIONAL 32 INPUT DEVICE(S) DISPLAY FLOPPY DRIVE HARD DRIVE 39 SYSTEM COMMUNICATIONS BUS I/O SUBSYSTEM MEMORY CPU PROGRAMS 22 26

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TITLE: An Apparatus and Method for Two Computing Elements in a Fault-Tolerant

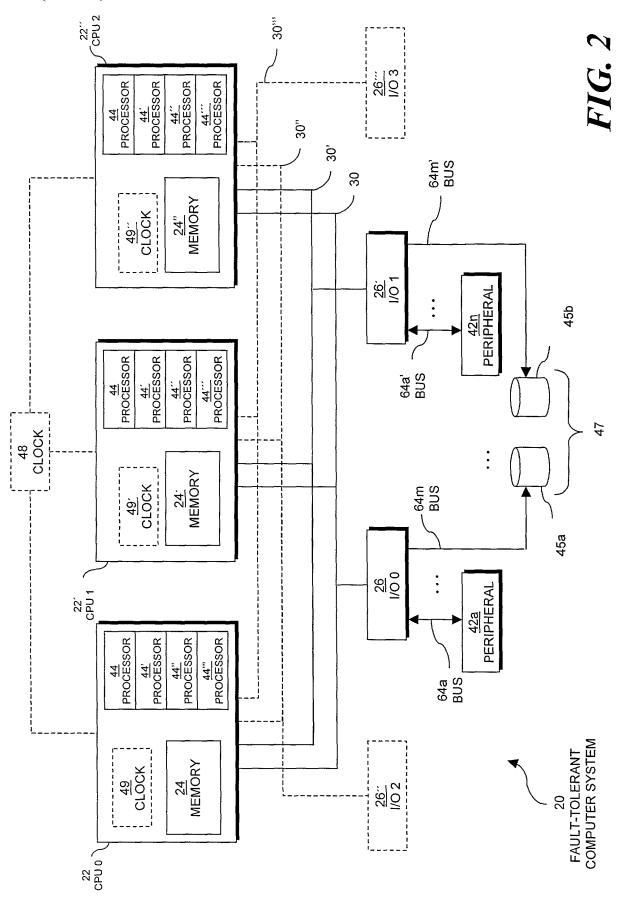
Server to Execute Instructions in Lockstep

Instructions in Lockstep APPLICANTS: Griffin et al. ATTY. DOCKET NO.: SRT-025 EXPRESS MAIL NO · EL653443302US

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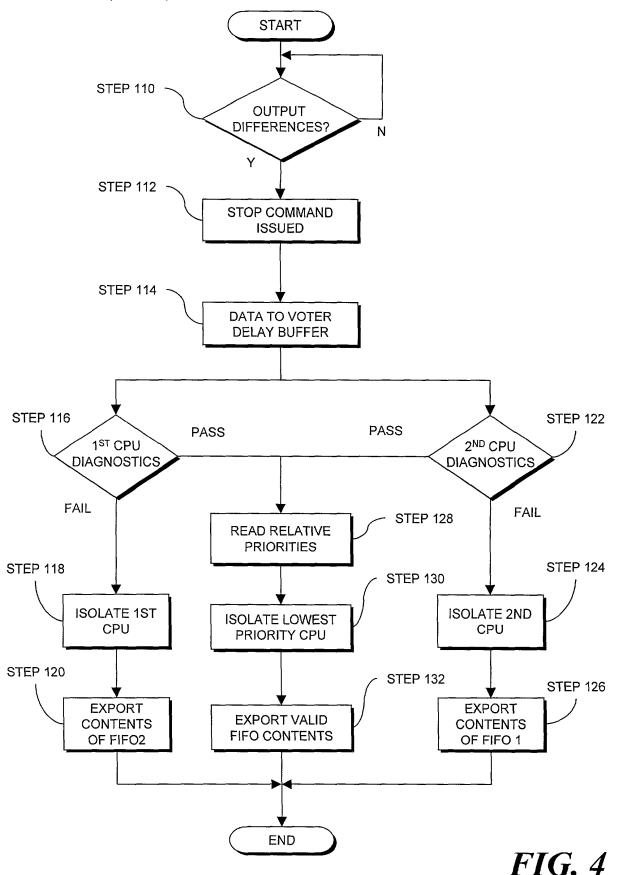
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TITLE: An Apparatus and Method for Two Computing Elements in a Fault-Tolerant Server to Execute Instructions in Lockstep
APPLICANTS: Griffin et al.
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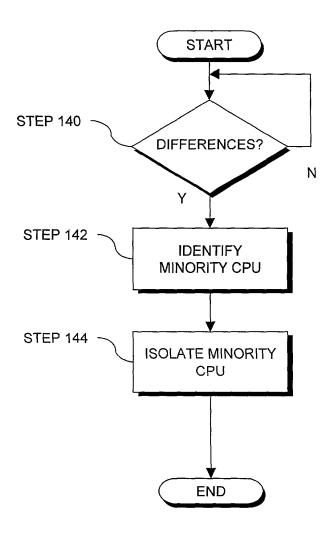
(Sheet 4 of 10)



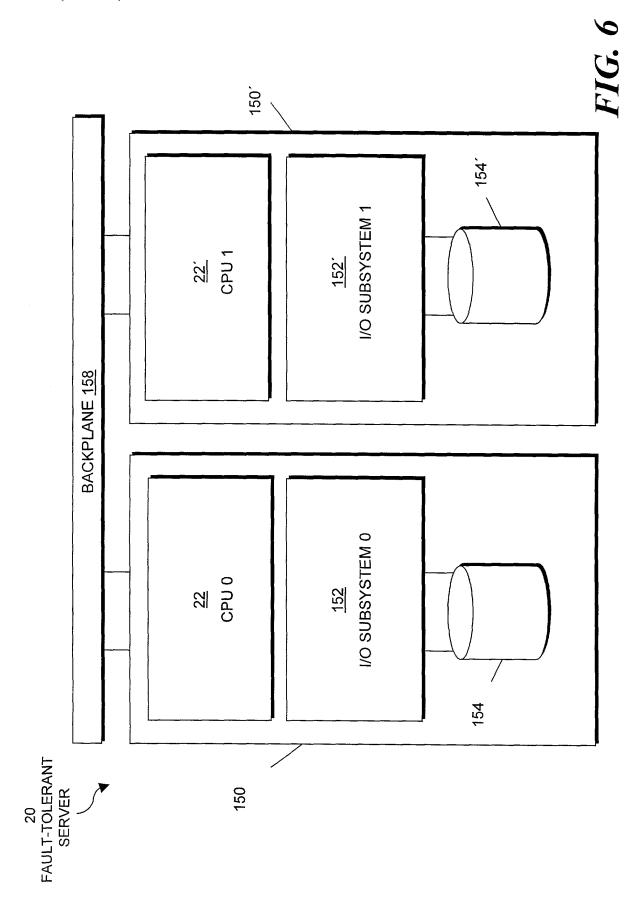
TITLE: An Apparatus and Method for Two Computing Elements in a Fault-Tolerant Server to Execute Instructions in Lockstep APPLICANTS: Griffin et al.

ATTY. DOCKET NO.: SRT-025 EXPRESS MAIL NO.: EL653443302US

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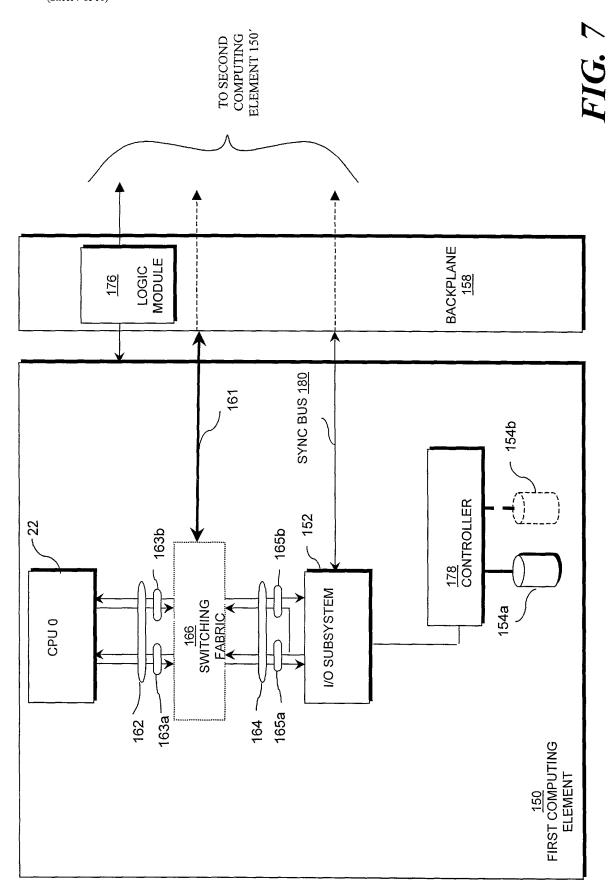
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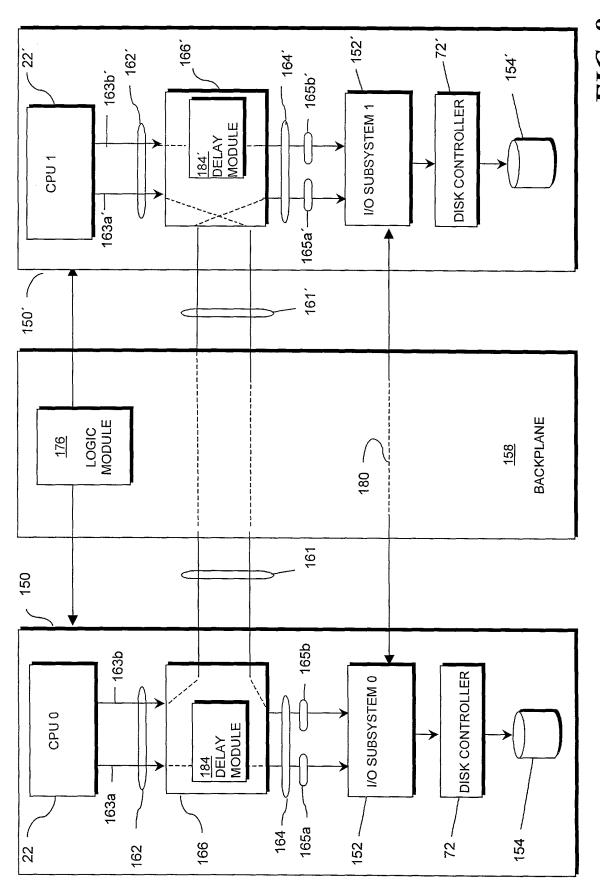
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APPLICANTS: Griffin et al. ATTY. DOCKET NO.: SRT-025 EXPRESS MAIL NO.; EL653443302US (Sheet 9 of 10) START **ESTABLISH COMMUNICATION STEP 204** BETWEEN A FIRST COMPUTING **ELEMENT AND A** COMMUNICATIONS LINK **STEP 208 ESTABLISH COMMUNICATION** BETWEEN A SECOND COMPUTING **ELEMENT AND THE** COMMUNICATIONS LINK **STEP 212 STEP 216** PROVIDE A FIRST INSTRUCTION PROVIDE A SECOND TO SWITCHING FABRIC **INSTRUCTION TO SWITCHING FABRIC STEP 220** TRANSMIT TO THE I/O SUBSYSTEM **STEP 224** COMPARE FIRST INSTRUCTION AND SECOND INSTRUCTION **STEP 232 STEP 228** MISCOMPARE? **ISSUE STOP** COMMAND Ν **STEP 236 EXECUTE THE FIRST** INSTRUCTION AND THE SECOND INSTRUCTION **END** FIG. 9

TITLE: An Apparatus and Method for Two Computing Elements in a Fault-Tolerant Server to Execute

Instructions in Lockstep

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